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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,292

08/18/2003

Shinichi Aya

Q76987

2004

23373

7590

05/19/2006

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EXAMINER

RIELLEY, ELIZABETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/642,292

Applicant(s)

AYA ET AL.

Examiner

Elizabeth A. Rielley

Art Unit

2879

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 April 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

ER 5/13/06

Continuation of 3. NOTE: the proposed amendments to the claims raise new issues that would require a further search.

Continuation of 11. does NOT place the application in condition for allowance because: the proposed amendments to the claims raise new issues that would require a further search. Please see attached sheet.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 4/24/2006 have been fully considered but they are not persuasive.

In regard to Applicant's argument that Kudo teaches heating an adhesion area, the Examiner respectfully disagrees. Kudo teaches the use of heater 4 to apply liquid metal 3 to an area of the electrode 1 (column 1 lines 35-40). This area is an "adhesion" area, that is, a place where something is adhered. The liquid metal is adhered. Therefore, the prior art of record teaches all the limitations in the current application.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In regard to Applicant's argument that Kudo teaches adjusting a degree of oxidation by changing the voltage, the electric current, the energizing period of the power source, or a combination thereof, the Examiner respectfully disagrees. Kudo teaches using heat as part of the oxidation process (column 1 lines 35-40) and also teaches changing the degree of oxidation, by changing the voltage as well as the time

Art Unit: 2879

period of the power source (column 7 line 25 to column 8 line 9). Therefore, the prior art of record teaches all the limitations in the current application.

In regard to Applicant's argument that the prior art of record fails to teach the use of a laser as a heating mechanism in order to oxidize an electrode, the Examiner respectfully disagrees. Sakamoto ('416) teaches a method of manufacturing a discharge tube that oxidized a predetermined area of an electrode by heating (column 5 lines 1-16). Sakamoto is silent regarding the use of a laser for heating. Horiuchi et al ('271) teaches the use of a laser as a heater for an electrode (column 15 lines 24-37) in order to increase the lifespan of the discharge tube (the explanation thereof is given in a detailed account in column 4 lines 15-29). Therefore, the prior art of record teaches all the limitations in the current application.

In regard to Applicant's argument that the prior art of record fails to teach the use of an infrared light source as a heating mechanism in order to oxidize an electrode, the Examiner respectfully disagrees. Sakamoto ('416) teaches a method of manufacturing a discharge tube that oxidized a predetermined area of an electrode by heating (column 5 lines 1-16). Sakamoto is silent regarding the use of an infrared light source for heating. Bundo et al ('901) teaches the use of an infrared light source as a heater for an electrode (column 9 lines 16-30; column 8 lines 44-63) in order to more effectively heat the electrode, thereby reducing a fly loss of luminescent substances within the arc tube (column 1 lines 13-35). Therefore, the prior art of record teaches all the limitations in the current application.

In regard to Applicant's argument that the prior art of record fails to teach the use of a ring-shaped ceramic heating mechanism, with a hole to insert the electrode lead in order to oxidize an electrode, the Examiner respectfully disagrees. Sakamoto ('416) teaches a method of manufacturing a discharge tube that oxidized a predetermined area of an electrode by heating (column 5 lines 1-16).

Art Unit: 2879

Sakamoto is silent regarding the use of an infrared light source for heating. Monneraye et al ('656) teach the use of a ring-shaped ceramic heating mechanism, with a hole to insert the electrode lead (column 2 lines 60-63; column 3 lines 5-15) as a heater for an electrode in order to heat the electrode (column 2 lines 60-63; column 3 lines 5-15). The ceramic ring is placed in an oven, which is part of the heating mechanism since ceramics do not give off heat naturally, but will transfer the heat absorbed from the oven to the electrode. It enables the electrode to be further heated. The ceramic ring, complete with hole for the electrode, therefore is a heating element. Therefore, the prior art of record teaches all the limitations in the current application.

In response to applicant's argument that Palmer et al ('345) is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Palmer et al ('345) teach a heating mechanism. Since the application is teaching various forms of heating mechanisms, Palmer is analogous art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

Art Unit: 2879

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Elizabeth Rielley

Examiner
Art Unit 2879


MARICELI SANTIAGO
PRIMARY EXAMINER